

AUG 4 1934

# THE RHODE ISLAND MEDICAL JOURNAL



Owned and Published by the Rhode Island Medical Society. Issued Monthly

VOLUME XVII { Whole No. 299      PROVIDENCE, R. I., AUGUST, 1934      PER YEAR \$2.00  
No. 8

SINGLE COPY 25 CENTS

## CONTENTS

### ORIGINAL ARTICLES

Medical and Surgical Causes for Mental Disease. By H. E. Kiene, M.D.	125
Cancer of the Mouth. By Peter Pineo Chase, M.D.	130
Pneumothorax and Phrenicectomy in the Treatment of Pulmonary Tuberculosis. By J. Murray Beardsley, A.B., M.D.C.M.	135

Contents continued on page IV advertising section.

ENTERED AS SECOND-CLASS MATTER AT THE POST OFFICE AT PROVIDENCE, R. I., UNDER ACT OF MARCH 3, 1879

## Loose Stools in Infants

require extra diapering, and inconvenience the mother

Clinically, loose stools are accompanied by a dehydration which, when excessive or long continued, interferes with the baby's normal gain. A long-continued depletion of water is serious, since "the fluid requirements of an infant are tremendous. A normal infant 15 pounds in weight will frequently excrete as much as one litre of urine per day. A negative water balance for more than a very short period is incompatible with life." (Brown and Tisdall)

Moreover, when the condition is superimposed by chance infection, the delicate balance may be seriously upset, since the infant's reserves have already been drawn upon, so that resistance to infection and dangerous forms of diarrhea may be too low for safety. Every physician dreads diarrhea, which Holt and McIntosh call "the commonest ailment of infants in the summer months."

**If you have a large incidence of loose stools  
in your pediatric practice —**

**TRY CHANGING TO A DEXTRI-MALTOSE FORMULA**

When requesting samples of Dextri-Maltose please enclose professional card to cooperate in preventing their reaching unauthorized persons.  
Mead Johnson & Company, Evansville, Indiana, U.S.A.

## ANTISEPTIC SOLUTIONS *for MUCOUS MEMBRANES*

**T**HE antiseptic solution to be applied to a delicate membrane should preferably be non-irritating; yet it should be effective.

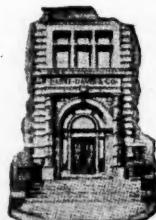
Neo-Silvol solutions are bland; they may be used in the eye without injuring or irritating the conjunctiva. But Neo-Silvol is an effective antiseptic agent, useful in affections of the eye, nose, throat, and genito-urinary tract.

Neo-Silvol solutions up to 50% strength may be made without difficulty, dropping the crystals into water and shaking in a stoppered bottle.

Neo-Silvol solutions are practically non-staining.

Neo-Silvol (Colloidal Silver Iodide Compound) is supplied in 1-ounce and 4-ounce bottles; also in bottles of 50 and 500 six-grain capsules.

Neo-Silvol (Colloidal Silver Iodide Compound) is accepted for N. N. R.  
by the Council on Pharmacy and Chemistry of the A. M. A.



PARKE, DAVIS & CO.

DETROIT, MICHIGAN

DEPENDABLE MEDICATION BASED ON SCIENTIFIC RESEARCH

# THE RHODE ISLAND MEDICAL JOURNAL

The Official Organ of the Rhode Island Medical Society  
Issued Monthly under the direction of the Publication Committee

VOLUME XVII { Whole No. 299  
NUMBER 8

PROVIDENCE, R. I., AUGUST, 1934

PER YEAR \$2.00  
SINGLE COPY 25 CENTS

## ORIGINAL ARTICLES

### MEDICAL AND SURGICAL CAUSES FOR MENTAL DISEASE\*

By H. E. KIENE, M.D.

CHARLES V. CHAPIN HOSPITAL, March 1, 1934.

Psychiatry and the other branches of medicine have many problems in common and a close correlation exists between mental and physical components. It is my purpose this afternoon to present three case records which show how the psychiatrist, internist, and surgeon, through their united efforts, have brought about a more thorough understanding of the pathology in these particular cases, the elimination of which has led to improvement.

The mode of examination is seen in the fundamental organization of the Psychiatric Department of the Charles V. Chapin Hospital, from whose records the cases to be presented today have been taken. The responsibility for the proper care of the patient rests with the resident staff. The condition present must be recognized and the proper study made in order to bring about as complete an understanding of the case as possible. With this in mind, a careful and detailed history is obtained, not only from the patient himself but also from those who know him best. It includes an account of any past illness together with a description of his normal personality, that is, his behavior and habits.

As soon as the admission routine is finished, a physical study is undertaken. A general physical and neurological examination usually shows the presence of organic disease, if any, but to be more certain, routine laboratory work is done. This includes urinalysis, blood Wassermann test, and spinal fluid examination. Spinal fluid is examined for cells, pressure, Wassermann test, and protein. All cases found to have evidence of organic systemic pathology are brought to the attention of the internist. If the case is chiefly a medical problem,

he supervises treatment during the patient's stay in the hospital. Depending upon the pathology discovered, other consultations are requested including genito-urinary, gynecology, surgery, ear, nose and throat, dermatology, ophthalmology, and roentgenology.

I present this introduction to demonstrate that the importance of physical examination and treatment is not under-valued in the hospital. Even though the Psychopathic Department has been in existence over three and a half years, there are many physicians in the community totally unaware of the methods practiced in the care of the patients they refer for treatment.

While the intensive physical study is progressing, the resident staff analyzes the mental components. Psychiatric examination is done, including observation and recording of patient's behavior, and mental symptoms such as delusions and hallucinations are studied. The sensorium is examined to show the presence or absence of dementia or confusion. There is also a review of the patient's subjective life, to find out why he presents such symptoms and to see, if possible, how he has reacted to the various influences in his past life. The social setting from which the patient has come is also investigated. In addition to the preliminary study by the consulting and resident staffs, the examination and opinion of the psychiatric visiting staff may be desired.

There is finally a collection of facts and opinions based on the examinations of various physicians, which leads to a formulation of what is wrong with the patient. Following the diagnosis, necessary treatment is instituted whether it be surgical, medical, or psychiatric. Usually the treatment will not fall definitely into one of the three groups, but instead there will be a close relationship found among these. At the same time medical or surgical treatment is instituted, the mental symptoms responsible for the patient's admission to the Psychopathic Department must be carefully watched.

The first case to be presented is one in which the pathology leading to mental symptoms required surgical treatment. The second is one in which the pathology was amenable to internal medication. The last is a case where the pathology led to mental

\*Presented before the R. I. Medical Society, March 1, 1934.

symptoms and required, besides medical and surgical treatment, also psychotherapy.

Before presenting the case material, I would like to call your attention to the type of reaction shown by the patient on becoming mentally ill, and how the symptoms depend on the personality of the patient.

The first patient is a married white woman, forty-two years of age, a housewife by occupation, who was admitted to the psychopathic hospital because she showed disorderly conduct while in St. Joseph's Hospital for treatment of pernicious anemia and proctidemia. Examination on admission showed her to be noisy, agitated, disoriented, confused, and untidy. Family history showed nothing significant regarding nervous, mental, or physical disease.

She was the first of two children, and completed high school at the age of eighteen. She was an exceptionally bright student and worked for six years in one position before her marriage. It was said she was a good-natured woman who was a good talker on any subject. She mingled well with people and enjoyed company. She enjoyed opera, and her reading consisted of books on history and biography. Catamenial history showed nothing abnormal until three years before admission to the Charles V. Chapin Hospital. Marked bleeding occurred, sometimes for a month. She had had a prolapse of the uterus for the past sixteen years. She was married at the age of twenty-one and there were two pregnancies. During pregnancy she was nervous and irritable. She was jealous of her husband and accused him of going with other women.

Five days following her second confinement in 1917, she developed a fever, became disturbed, and imagined her baby was dead. She screamed and talked incoherently about "babies going home." She imagined she heard bells ringing and someone singing. For one month she received treatment at the State Hospital for Mental Diseases, and was then discharged with the diagnosis of manic depressive psychosis, manic phase, condition recovered. During the sixteen-year period between that hospitalization and the one under discussion, there were no mental upsets although there were occasions when she would be suspicious of her husband.

Eight months before she entered the Chapin Hospital, she became irritable and shrieked at her husband and son. Pernicious anemia was suspected at St. Joseph's Hospital where she was admitted

for study. While there she began to worry about her physical condition and was afraid there would be an operation for the uterine prolapse. She talked loudly and at times incoherently, and would repeat vowels and rhymes such as cat, bat, rat, etc. It became necessary to transfer her to the Psychopathic Hospital.

Physical examination on admission showed her to be a thin, pale, middle-aged woman with prolapsed cervix protruding through the vaginal orifice. The examination was otherwise essentially negative. Laboratory findings showed negative spinal fluid, normal blood chemistry, negative blood Wassermann, and blood smear showed definite achromia and moderate variation in size (more microcytes than macrocytes), with no polychromatophilia, stippling, or immature forms.

Dr. Louis Kramer of the medical visiting staff considered the anemia as secondary to metrorrhagia. Dr. R. DiLeone, gynecologist, made a diagnosis of complete uterine prolapse and advised operation as soon as patient was in better physical condition.

Further laboratory work showed WBC 8,850 and RBC 3,660,000 with hemoglobin 50%. Catheterized urine specimen indicated slight trace of albumin but was otherwise negative. Gastric analysis—free HCl with histamine. White blood cells were found on repeated examinations. Examination of the stool for blood was negative. Red blood count three weeks after admission was 4,990,000 and hemoglobin 65%. Blood smear at this later time showed that most of the red cells were achromatic. There were a few macrocytes but there were more microcytes. The picture suggested a secondary anemia rather than pernicious anemia.

Dr. McCann, gynecologist, saw the patient one week later and said, "Complete prolapsus uteri. Uterus small, no masses or adhesions on either side. Would advise vaginal hysterectomy." Several donors were typed, in preparation for the possible need of transfusion at the time of operation.

During the time her physical condition was being studied, a mental examination was also in progress. She was at first disoriented, talked incessantly, was confused, and her trend of talk was disconnected. She was unco-operative, at times resistive, and she showed marked motor activity and restlessness on the ward. The mental content could not be definitely elicited because of her incoherence. The following is a sample of her productions: "The

hemoglobin—the red is a bet—I knock—I no scared—the agony—the nurse that put me there—I was stiff—I had a corpse—I get the melody, the rhythm," etc. She was silly and laughed frequently. She was destructive (tearing the bed clothing) and she had to be fed through a stomach tube. She voided and defecated in bed.

After twelve days, she was rational and pleasant for short intervals. She was co-operative, and ate breakfast and dinner. On the 15th day she said, "Being a virgin had nothing to do—praying at the foot of the crucifix—what have I done? My God, deliver me from here." She cried and pulled her hair. On the 28th day she acted silly at intervals, laughed for no apparent reason, tended to be seclusive, and was irritable. She said, "There isn't much here to read. I have read a great deal and I like to read when I get something worth while." She ate well. On the 40th day she was irritable and got out of bed when not watched. She talked and sang to herself, and was very childish in her manner. She collected odds and ends and tucked them under her mattress. The patient was neat in personal appearance, pleasant when spoken to, happy, her appetite was good, and she attended occupational therapy class.

On the 45th day (October 17, 1933) she was transferred to the surgical ward, where a Mayo operation for vaginal hysterectomy and a perineorrhaphy were performed by Dr. McCann. Pathological report disclosed atrophic endometritis, low grade chronic inflammation of cervix. On October 27, Dr. Burgess of the visiting medical staff said, "The anemia is apparently microcytic and probably is amenable to adequate iron therapy. Advise iron and ammonium citrate, gr. XXX, T.I.D., p.c."

Ten days post-operative, she was transferred back to the Psychopathic Department. She was pleasant and said she was glad to be back again where there was more sunshine. Since the operation she has shown no gross mental symptoms.

Pre-operative treatment consisted of sedatives, tube-feedings, continuous baths, liver intramuscularly, iron and ammonium citrate. Post-operative care included tonics, liver, occupational therapy, fresh air, and sunshine.

In this patient there was an anemia, on admission to the hospital, associated with an active, confused, mental reaction. As the anemia responded to therapy, the mental symptoms took on a different form, consisting of less confusion and more coher-

ent speech, but with a continuation of the over-activity and flight of ideas. Following operation, although her R.B.C. was lower than it had been before operation, there was a clearing of the overt mental symptoms. After the operation, because of an abscess, the R.B.C. became lower than it had been at any time since her admission to the hospital, but this was not associated with any appreciable change in her mental attitudes, which were practically normal.

Her mental illness sixteen years ago occurred after childbirth, which was associated with a loss of blood and followed by a prolapsed uterus.

In my opinion there was more than an anemia responsible for the mental symptoms. It is quite likely that the uterine prolapse and its psychological effect on the patient's life was an additional factor. At least it seems necessary to consider all angles before the patient's reaction can be satisfactorily understood.

The second case is one in which the pathology leading to mental symptoms proved to be chiefly a medical problem. Another woman of the same age (forty-two years) was admitted to the Psychopathic Department of the Charles V. Chapin Hospital because of auditory hallucinations, confusion, and rambling conversation.

Her father had died at the age of fifty-six years of a ruptured appendix. He was described as having been a very kind man. The mother died when fifty-two years of age of pneumonia. She was said to have been a smart and thrifty woman. Patient's only sister (now forty-eight years old) is a pleasant, sociable woman. No instances of psychosis, epilepsy, or familial disease were elicited.

Patient was born in Sweden. Birth was normal and she was breast fed. No childhood diseases are remembered. She finished six grades in a country school in six years and then worked on a farm. When fifteen, she came to the United States and worked for one family for six years doing housework. She was married when she was twenty-eight years old. There were two pregnancies and both children are still living. The husband was described as a drunkard who was very abusive and never supported his family. All the time she lived with him she was under considerable nervous strain. She finally divorced him six years ago as he would come home "raving drunk." Following the divorce she bought and ran a rooming house which she has managed ever since, being quite successful until the

economic depression. In spite of the depression, she was able to pay her bills and support her children. The clinical history is negative for operations, accidents, or serious illnesses.

She is described as having been a very happy and good-natured woman who worked hard and had very little time for recreation. Even during her married life she had to take in washings to support the home. She was a thrifty woman and a good manager. She was reserved and reticent about telling her troubles. She is a Protestant, but rarely attends church. It was claimed that she abstained from the use of alcohol, drugs, and tobacco.

Five months prior to her admission, she began to vomit blood and show blood in her stools. She was treated by Dr. Cutts. The bleeding stopped within two days but she remained in bed for two weeks. She then got up and returned to work. Three months later she had the second spell in which she vomited blood and showed blood in the stools. Dr. Schmidt treated her and she was in bed for three weeks, and then recovered and seemed quite well until two weeks before her admission, when she again vomited blood. During the first week she was unable to talk because of weakness and during the second week she began to show mental symptoms. She thought that people were stealing her furniture, she was confused, and she talked about seeing people all around her. It was difficult to keep her in bed as she kept insisting on getting up and cooking. The night before admission she threw herself off the bed, got up, and played the piano.

On admission to the hospital the patient was very pale, underweight, and undernourished. Mucous membranes were pale, and lower teeth were in poor condition. There was a suggestion of a presystolic thrill, and both systolic and diastolic murmurs were heard and transmitted through vessels of the neck. Neck vessels were distended and showed marked pulsation. There was a tremor of the hands. Blood pressure was 168/90, temperature 100.8° and pulse 100. Red blood count was 1,490,000 with hemoglobin 26%. In the blood smear there was a variation in size, shape and staining of the red cells with some achromia and no premature forms. The smear suggested an anemia of a secondary type. Slight possible trace of albumen was found in the urine.

She was restless, confused, disoriented, and threw the bed clothing on the floor. She was incoherent at times. Voices were heard, especially at night, which gave her advice about her children.

She realized they were imaginary voices as there was no one around at the time.

She was in a critical physical condition, so members of her family were typed for transfusion. She was kept quiet with sedatives and was given 10 c.c. of liver extract intramuscularly. On the third day she received a transfusion of 390 c.c. of blood. Again on the fifth day, a 350 c.c. transfusion was given. The next day she was drowsy, confused, incontinent and restless, and her color was poor. Temperature reached a maximum of 103° with pulse of 120. The red blood count was 2,450,000. Very slight trace of blood was found in the stools. The blood and spinal fluid Wassermann tests were negative. She was placed on a soft, non-irritating diet.

On the sixth day, and through the greater part of the night, she was confused, noisy and restless. She told one of the doctors he should go to the Rhode Island Hospital because he couldn't get enough experience at the Chapin Hospital. Her color seemed better, her temperature was 100° and pulse 96. The red blood count was 2,990,000 and hemoglobin 45, reticulocytes 1%.

There was not much change in her condition and on the eighth day after her admission she was drowsy and confused. There was incontinence. At intervals she was restless and tried to get out of bed over the sideboard. The red count was 3,560,000, hemoglobin 50, reticulocytes ½%, temperature 100° and pulse 96. Treatment consisted of iron ammonium citrate, sedatives, liver by hypodermic injections, and soft diet.

Four days later (on the eleventh day of her hospital residence) she seemed less confused although she thought she heard her children upstairs. Her red blood count was 3,900,000 with hemoglobin of 50 and reticulocytes 1%. Temperature was normal, and pulse ranged between 95 and 100. Previous treatment was continued.

By the eighteenth day she was pleasant and cooperative, and seemed pleased with herself. She complained of not getting enough to eat. The red blood count on that date was 3,850,000 and hemoglobin 60%. Temperature was normal and her pulse was between 95 and 105.

On the twenty-ninth day (the day before her discharge from the hospital) she took more interest in ward activities and was anxious to go home. She worked well about the ward and was not talkative or silly. Patient was sociable and pleasant and

stated she was anxious to return to work. She was happy when she saw her children. The red blood count at that time was 4,620,000 and hemoglobin 80%. Temperature was normal, pulse was from 70 to 80, and there had been a gain in weight of four and a half pounds.

While in the hospital, she was examined by Dr. Louis Kramer and Dr. Russell Bray. Both were of the opinion that she should receive palliative treatment because of her poor physical condition.

After her discharge, she returned to the Out-Patient Clinic where Dr. Bray continued the clinical study. Gastro-intestinal X-ray examination resulted in the report of extreme irritability, filling defect, and speed of emptying indicative of active pathology in the duodenal bulb, and suggesting ulcer. Red blood count was 3,350,000 and hemoglobin 58%. She had a hyperchlorhydria. Dr. Bray felt certain of the diagnosis of duodenal ulcer and is continuing her treatment in the Out-Patient Department where she is making satisfactory progress.

In this patient there was a more definite association of mental symptoms with the degree of anemia. Supportive treatment led to both physical and mental improvement. Earlier environment difficulties may have had some bearing on her tendency to develop mental symptoms when the trauma of the anemia lowered her resistance. Also, it is to be noted that her mental symptoms continued as long as the tachycardia and ceased when the pulse became normal. This may indicate the length of time required by the body and mind to readjust after such a severe illness. The body weight also seems to substantiate such a view. Her admission weight was 105 pounds and two days before discharge this had not varied more than one pound. With the return of her mental condition to normal, she gained rapidly and now her weight is 130 pounds, the most it has ever been.

The last case is one which necessitated psychotherapy in addition to medical and surgical treatment. A variety of conditions occur in cases of this sort. After omitting epilepsy, syphilis, alcohol, and the changes incident to old age, the following are examples:

1. Cardio-vascular-renal disease
2. Carcinoma of the esophagus
3. Carcinoma of the lung
4. Prostatic calculi
5. Infectious arthritis

6. Pernicious anemia
7. Auricular fibrillation
8. Perineal laceration
9. Sclerosed hymen
10. Hypothyroidism

In the cases observed, these diseases were associated with personality disorders of various kinds, but it is impossible, in the limited time this afternoon, to give the complete hospital record of each case in detail. For brevity, therefore, only a brief abstract of one example will be given.

A white woman, forty-five years old, was admitted to the psychopathic ward because she threatened suicide, was unable to perform her housework, and had crying spells.

The history stated she had always worked hard and had been the support of her father and mother. She had no personal experiences with men until her marriage at the age of forty-five to a widower five years her senior. Two days before her marriage, her mother (who had always been domineering) started weeping and lamenting over the approaching marriage. Following this, the patient walked the floor all night. She thought that something had snapped in her abdomen.

Following her marriage, she was afraid of dying. Visions of her mother and father appeared, which she was unable to get rid of. For several months she complained that her head was light and also complained of a secretion from her stomach. She had periods of vomiting saliva. At night she would become fearful, would hold herself rigid, and cling desperately to her husband, sometimes almost choking him. When her mother visited, she was sent away, the patient saying she did not wish to have anyone but her husband. She became sexually aroused, but was fearful of sex relations and when her husband attempted to have coitus, she became panicky and dug her nails into him, and fought him off. She took little interest in her personal appearance, frequently laughed at her husband, and wandered about the streets by herself. She made no attempt to form acquaintances and frequently was found weeping, and she talked of ending it all by jumping out of the window. She lost about seven pounds weight in eight months. Her appetite became poor. She was seen by many physicians and also at the State Hospital Evening Clinic, and was finally admitted to the Charles V. Chapin Hospital.

She said she was deeply in love with her husband, but continued that he had no patience with her.

He threatened her with divorce and called her "crazy." Sexual relations had been unsatisfactory.

Physical examination presented no abnormal findings other than a sclerosed hymen which would make proper sexual relations impossible.

This patient presented a complex problem. Her anxiety and depression were apparently the culmination of many maladjustments which patient had during her life. She had always been an inadequate individual, one who was dependent on others for moral support. She lived in an unhealthy environment in her parents' home before her marriage. Her marriage apparently was an attempted escape from this unhappy situation but instead of improving her condition, she had to make a more difficult adjustment relating to sex. Because of her emotional immaturity and total dependence, a sex adjustment was impossible, and as a result she was admitted to the hospital in a mild depressive state, showing marked emotional instability and borderline intelligence.

It was thought that certain anatomical conditions might have had some influence in making the patient's sex adjustment more difficult as it was found that she had a sclerosed hymen and a Bartholin cyst which impeded normal sex relations. She was therefore referred to the gynecologist and operated by Dr. Waterman. Her recovery from the operation was satisfactory although her mental condition did not immediately show much change. She was given privileges while in the hospital and allowed to come and go as she wished.

An interview with her husband showed him to also be an emotionally immature person who was self-centered and spent most of his time feeling sorry for himself. Likewise, her family did not offer much in the way of possibilities for assisting the patient to a better adjustment.

It was believed by the staff of the hospital that the patient was not suffering from a psychosis but was rather an inadequate, mentally retarded individual, who was unable to make an adult adjustment and the case would require a great deal of follow-up treatment, both of the patient and her husband. This has been carried out since she left the hospital. Now, eleven months later, she has taken a new interest in her surroundings, and is able to properly care for her home. There are not so many quarrels between the patient and her husband, and their personal relations have improved markedly.

Surgical treatment in this case was quite essential, but psychotherapy was of equal importance. Few patients' mental troubles are as easy to straighten out as this last case has been.

Before psychotherapy is instituted, it is important to know what intellectual assets are present in the patient under consideration. A person with normal or superior intelligence usually presents a more complicated mental conflict than does one who has dull normal or borderline intelligence. In the latter, the psychotherapy is on a more superficial level and the patient's problems can quite often be explained on a physical basis; that is, the mental difficulty has been caused by an interference with physical pleasures on which such individuals are largely dependent.

#### CANCER OF THE MOUTH\*

By PETER PINEO CHASE, M.D.

122 WATERMAN ST., PROVIDENCE, R. I.

Cancer of the mouth is one of the most terrible forms of this great scourge of mankind. The patient is a great sufferer himself and frequently a very disagreeable object to his associates. In the past, in our community at least, a fatalistic attitude has been held towards these cases. This was due to the advanced and hopeless stage in which the patient presented himself for medical advice. But with the publicity now given to the cancer question and the enlightened attitude of the general practitioner, and what is very important, of the dentist, many of these cases are now seen when susceptible of cure or at least of palliation and prolongation of comfortable life. The crux of successful treatment is of course here as everywhere to get the case early. And as Channing Simmons emphasized several years ago, we must consider the period of relief given by proper treatment rather than cure.

Cancers of the buccal mucus membrane or interior of the mouth are frequently considered separately from the lip, being of a more malignant type in general and because of the difference in lymphatic drainage being more extensive in their metastasis.

Cancers of the lower lip are common, especially in men, and are supposed to be associated with

\*Read before the April meeting of the Providence Medical Association, 1934.

smoking, particularly a pipe, although of course far from all cases occur in smokers. The greater use of tobacco in modern days by women apparently is not causing lower lip cancers in this sex. Personally I have never seen a case. At the Tumor Clinic at the Rhode Island Hospital, roughly about 10 per cent of our cases have been of the mouth and lip, and the lip cases have been exactly equal in number to those inside the mouth. Nowhere in the human body is cancer more easily and quickly detected. In fact, one would suppose that notice and attention to the trouble would be absolutely forced upon the patient. Any crack or ulceration which does not heal in a few weeks should be considered cancer until proved otherwise. Therefore a biopsy should be done and unless the lesion is very large the entire affected area to well outside any induration can be removed which in itself will probably give a local cure.

Undoubtedly the radium treatment of these lesions is strongly advocated now but judgment in the use of radium requires much experience. As one writer recently said, "The mere possession of radium is of no more consequence in itself than is the possession of a set of surgical instruments." Overdosage causes burns that are long and distressful in healing. An excision is healed in a week. Underdosage is worse than no treatment. Our clinic has seen some sad cases of this kind and we feel that the average man can use surgery more safely than radium. Theoretically it sounds simpler to use radium than surgery. Many people are still heard to say, "I don't want to have the knife." But there is a good deal of fallacy here. Surgically the average lip cancer can be removed very satisfactorily under local anesthesia and heals by first intention with little discomfort and with a good cosmetic result. The surface application of radium requires great judgment in dosage, does not direct its attack to the depths of the tissue which is the critical area and leaves an ulcer taking many weeks to heal. Apparently the use of needles buried in the lip is increasing and this is in itself a surgical procedure needing anesthesia. Many of the users of radium do not take biopsies here and probably experienced men seldom make a mistake in diagnosis but in our clinic we have a strong predilection for a microscopical examination which influences our treatment and prognosis.

The lymph glands in the neck should have in many cases either heavy radiation or dissection with

most clinics advocating dissection in favorable cases. This should be done en masse with one incision running under the chin and back to each jaw angle taking the contents of the sub-mental and digastric triangles. Cancer of the upper lip is rare and like infection here is apparently especially serious.

Inside the mouth irritation is credited with initiating cancer. Bloodgood gives a very large role to tobacco and poor mouth hygiene; poor teeth and syphilis are incriminated. A surprising number of cases that we have seen have had one tooth after another pulled in an attempt to clear up a supposedly infective process.

Any gum that does not heal soon after an extraction should be examined for cancer. Of course a Wassermann should be done in all cases, but the mere fact that it is positive is no proof against cancer which is often associated with syphilis. If a lesion does not heal rapidly with anti-syphilitic treatment a biopsy should be done. A couple of years ago we had a case of proved syphilis with a lesion on the tongue. A biopsy showed no cancer, but a second biopsy showed a grade III epidermoid carcinoma and the patient did well for awhile with intravenous medication, partial glossectomy and a block dissection of the neck.

Formerly we were taught that it was dangerous to cut into cancers for biopsy, but all these are already well irritated and a biopsy followed by quick removal we feel does not increase the risk. In December several years ago a college friend noticed a sore on the dorsum of his tongue which appeared to be relieved when a tooth was fixed. In February he noticed it again. A well-known dermatologist at the Massachusetts General Hospital cheered him up by pronouncing it either syphilis or cancer. Although a married man and apparently all that a teacher of youth should be, he had Wassermann done at different times in Massachusetts, and at two laboratories in Providence. All were negative. Then we removed the area with a liberal biopsy and found no evidence of cancer, but merely granulation tissue. A fungating mass covering most of one side of a tongue a year or two ago was removed and frequent sections showed nothing but a papilloma. Both of these cases are perfectly well. Gross pathology in the mouth is frequently difficult to interpret and biopsies are of great value.

Right here it may be in line to speak of the question of grading cancers. The low grades of malig-

nancy are in general amenable to surgery and radio resistant and the high grades the reverse, but Dr. Clarke, I think, will agree that grading is far from exact and at best very dependent on the personal equation of the pathologist. The history size and appearance of the tumor are valuable in determining treatment as well as the microscopical findings. A lip done last Spring followed by neck dissection was graded 1, but died in three months. Another lip graded 11 went to pieces almost as rapidly. And some tumors that on first examination appear low grade change their nature so that sections taken from recurrences show an entirely different picture.

Women have much less mouth cancer than men, but in St. Louis they told us they frequently saw female cases from the Ozarks where the women chew snuff. A few years ago we removed a small cancer from the side of a woman's tongue and some time later an apparently entirely separate one from the other side. —She did not smoke but had false teeth and used much vinegar and other sharp acids. Recently we treated a cancer on the mouth of an old colored woman who confided secretly to several of us that she smoked a pipe. Within a few years we have had three other cases in women.

Radium is the method of choice for buccal cancer in most clinics now but where the growth is early, low grade and small so that it can be easily got around as in the tongue apparently a complete removal with the high frequency knife gives the quickest and excellent results. This with a block dissection of the entire side of the neck has a number of satisfactory representatives still walking the streets of Providence. Dissection of both sides of the neck is advocated but so far we have never convinced both ourselves and the patient that it should be done. One side usually spoils a morning for the two of us.

The earliest tongue case I assisted at was in a clergyman who before the war had a hemiglossectomy and neck dissection. If I remember rightly in about three months he was lecturing at Divinity School and talked well until his death from pneumonia a few years ago; but extensive and mutilating surgery for cancer in the mouth has given way almost entirely to radium. Dr. Finney told me that he had done four or five complete removals of the tongue but that he would never do another.

Occasionally we find a mass of cancerous glands in the neck with no primary focus demonstrable. It has been suggested lately that these may originate

in the depths of the tonsillar crypts and if the neck can be handled it is advisable to remove the tonsil surgically.

One unusual case that might be mentioned is an elderly man who had a growth on his anterior pillar that appeared possibly removable by surgery, so we took it off, put some radium in a spot that did not seem to heal satisfactorily, dissected metastatic glands that afterwards appeared in his neck, had Dr. Pickles do an injection for nerve pain and now a couple of years later he shows no sign of trouble and is perfectly happy. Which teaches that it is worth while persevering in some of these difficult cases.

The floor of the mouth is not a region lending itself well to surgery and tumors here are usually of the higher grades responding to radiation so radium is usually employed here. The same is true of the inside of the cheeks where surgery is mutilating and radium produces results.

Care must be taken to checkup by X-ray where there is any possibility of the bone or sinuses being involved. Radiation is not effective where cancer of the surrounding soft tissues has spread thus and surgery offers the only hope of clearing up the bone condition.

Epulis is a much mentioned but apparently not remarkably common tumor on the alveolar process appearing as a firm circumscribed small swelling. Although not malignant, they will continue to grow if not entirely removed, and this must be done surgically. Mixed tumors of the type commonly associated with the parotid gland may be found anywhere in the mouth and again require complete surgical removal.

Wherever radiation is indicated, gold implants of radon are very convenient and effective but are apt to irritate a good deal and in extensive cases are expensive. We have a number of platinum needles such as the English use and where we can keep them in (and it is surprising how they will stick with some sewing) the results are good. We have used both neck dissection and X-ray with this; the former where we felt more optimistic. Wherever there are bad teeth near the lesion we have them removed. Some of this work is done under local anesthesia but the tongue is a refractory organ and despite the patient's desire to co-operate we usually feel the need of a general anesthetic when this organ has to be handled. Avertin has given

(Continued on page 134)

# THE RHODE ISLAND MEDICAL JOURNAL

Owned and Published by the Rhode Island Medical Society  
Issued Monthly under the direction of the Publication Committee, 106 Francis Street

FREDERICK N. BROWN, M.D., *Editor*  
309 Olney Street, Providence, R. I.

CREIGHTON W. SKELTON, M.D., *Business Manager*

ASA S. BRIGGS, M.D.  
ALEX M. BURGESS, M.D.  
W. LOUIS CHAPMAN, M.D.  
PAUL APPLETON, M.D.  
WILFRED PICKLES, M.D.  
NORMAN M. MCLEOD, M.D.  
ALBERT H. MILLER, M.D.  
DENNETT L. RICHARDSON, M.D.  
GUY W. WELLS, M.D.  
F. B. LITTLEFIELD, M.D.

Associate Editors

Committee on Publication

FREDERICK N. BROWN, M.D., *Chairman*  
C. W. SKELTON, M.D.  
HENRY W. HOPKINS, M.D.  
*President and Secretary, ex-officio*

Advertising matter must be received by the 10th of the month preceding date of issue.  
Advertising rates furnished upon application to the business manager, CREIGHTON W. SKELTON, M.D., 106 Francis St., Providence, R. I.  
Reprints will be furnished at the following prices, providing a request for same is made at time proof is returned: 100, 4 pages without covers, \$6.00; each additional 100, \$1.00; 100, 8 pages, without covers, \$7.50; each additional 100, \$2.80; 100, with covers, \$12.00; each additional 100, \$4.80; 100, 16 pages, without covers, \$10.50; each additional 100, \$3.00; 100, with covers, \$16.00; each additional 100, \$5.50.

SUBSCRIPTION PRICE, \$2.00 PER ANNUM, SINGLE COPIES, 25 CENTS.  
Entered at Providence, R. I. Post Office as Second-class Matter.

## RHODE ISLAND MEDICAL SOCIETY

Meets the first Thursday in September, December, March and June

ALBERT H. MILLER	President	Providence
ROLAND HAMMOND	1st Vice-President	Providence
JOHN E. DONLEY	2nd Vice-President	Providence
J. W. LEECH	Secretary	Providence
J. E. MOWRY	Treasurer	Providence

### DISTRICT SOCIETIES

#### KENT

Meets the second Thursday in each month

DR. JOHN A. MACK	President	West Warwick
DR. L. J. SMITH	Secretary	Buttonwoods

#### NEWPORT

Meets the second Thursday in each month

JOHN RIDLON	President	Newport
ALFRED TARTAGLINO	Secretary	Newport

R. I. Ophthalmological and Otological Society—2d Thursday—October, December, February, April and Annual at call of President.  
Dr. Robert C. O'Neil, President; Dr. N. A. Bolotow, Secretary.

The R. I. Medico-Legal Society—Last Thursday—January, April, June and October, Archibald C. Matteson, President; Dr. Jacob S. Kelley, Secretary-Treasurer.

PAWTUCKET  
Meets the third Thursday in each month excepting July and August

HENRY J. HANLEY	President	PAWTUCKET
THAD A. KROLICKI	Secretary	PAWTUCKET

#### PROVIDENCE

Meets the first Monday in each month excepting July, August and September

CHARLES F. GORMLY	President	Providence
P. P. CHASE	Secretary	Providence

#### WASHINGTON

Meets the second Wednesday in January, April, July and October

E. E. KENYON	President	Kingston
JOHN CHAMPLIN, JR.	Secretary	Westerly

#### WOONSOCKET

Meets the second Thursday in each month excepting July and August

W. A. BERNARD	President	Woonsocket
T. S. FLYNN	Secretary	Woonsocket

## EDITORIALS

### A HOBBY EXHIBITION

The unrelenting responsibilities of the practice of medicine in any of its forms are so constantly before the average doctor that it is difficult for him to find time for protracted vacations. It is therefore quite natural that he should take advantage of his fragmentary spare time in transitory forms of diversion and mental relief. Such is the etiology of the professional man's hobby.

A casual inquiry of the form which this "hobby-culture" takes in individual cases reveals a surprising diversification of endeavor and an equally unexpected expertness of many of the men in these vocational efforts. There are among our colleagues notable collectors of books, accomplished musicians, enthusiastic philatelists, sculptors, artists, photographers, and horticulturists, as well as proficient and experienced woodsmen and anglers, and some splendid woodworkers.

With this in mind would it not be worth while for one of our medical societies to hold a hobby exhibition? Such a display would be of wide-

spread interest both within and without the profession and would undoubtedly bring out some striking examples of unknown and unsung talent among our colleagues.

A similar effort last fall by the doctors of Greater Boston revealed some splendid work and attracted great interest and very favorable comment. An exhibition at Brown University showed up a great deal of hitherto unknown talent among the faculty members, much of which has since become mutually helpful in the teaching work of that institution.

An exhibition of such inclusiveness as to be expressive of all Rhode Island doctors' pastimes would be a salutary step in the direction of extra-medical interest and mutual respect. Let's try it.

---

#### DOCTORS AND THE DEPRESSION

The economic stringency of the last few years has precipitated many changes and one of these has been the changed attitude of the medical profession toward public health in its broadest aspects. Previously physicians have been content to give close attention to their own practice without giving much thought to public medical service. Ascribe, if you will, to selfish motives there is, however, almost certain brighter prospects not only for the physician's welfare but also for public health service in general.

Physicians have been shaken out of a sort of a lethargy. They have observed the rapid development of hospital service and of public health services which have been developed to meet real needs which the public demanded, observed it with some grumbling but without any concerted effort to become public health leaders. Many measures now carried out are the result of official health laws and regulations and private organizations. People are getting to be very much health-minded and it is no wonder that the laity have taken the initiative to get some things done which should have been done some time ago. If the American Medical Association, state medical societies and medical schools had foreseen or appreciated the importance of public health and had done some constructive work the whole public health program would have been far in advance of what it is today. They did not, and physicians have grudgingly followed the lead of a few distinguished physicians who have devoted their lives to fathering sane public health measures,

in the face of opposition not only from physicians but also the inertia of the public. In a way it has been a thankless job, but at least these pioneers have seen an awakening of the public to the need of better medical service and an appreciation on the part of the physicians that it is needed and is inevitable.

Perhaps it is not too late for the medical societies to take or regain the leadership in supplying a better curative and preventive medical service. At any rate, they are fully aroused that something must be done. They are seeing the spectre of socialized medicine, and some there are who are more or less resigned to something of the sort.

The progress which has been made in better care of the sick and injured has been brought about by the initiative of a free profession unstifled by bureaucratic rules and regulations. The progress in this country in the quality of individual treatment both medical and surgical is something of which the profession may be proud. Why can't that same driving force be harnessed to bring about better medical service to everybody alike whether rich or poor, curative or preventive?

On the shoulders of the physician is rightly placed the burden of caring for sick people and the prevention of disease, whether it be done gratuitously or for adequate fees. If he does not accept this burden and adjust it not only for his own welfare but also for the welfare of the whole country then he is shirking his duty, and the high esteem which he now enjoys will be dimmed.

The whole problem is complicated. It will require a great deal of study. Certain things should be accomplished. People must be taught that they should help to carry the financial burden individually as far as possible. Some of them are in no economic condition to bear their share and must be assisted. It must be worked out with patience by medical societies, hospitals and public health authorities in friendly cooperation.

---

#### CANCER OF THE MOUTH

(Continued from page 132)

satisfaction in most instances. Post-operative care of the mouth is important, and we use hourly lavage. Many of these cases have pain afterwards, and we have been helped at times by Dr. Pickles, who has made alcohol injections of nerves for us.

We have said nothing about pre-operative radiation, having up to the present very little experience with it. The question of radiation versus block dissection we feel still to be a debatable one.

It may seem that I have protested at places in this paper against the radiation treatment of mouth cancer. It is not intended to be so but a number of papers recently by radiologists, especially from some of the outlying parts of the country, have apparently sought to show that surgery is an outmoded method. Probably at the Tumor Clinic at the Rhode Island Hospital we use more radiation than surgery. Our attitude has been well expressed by Carl Eggers, who said recently: "I am convinced that a suitable combination of the two methods has great advantages and holds out more hopes to the patient than the use of either alone."

But, whatever you do, do it quick and hard. Not only is the case handled more easily in its early stages, but it is generally agreed that a cancer once treated, especially by radiation, seems to become more resistant if not cured and secondary treatments are less effective.

#### *Conclusions*

1. Cancer of the mouth is an especially terrible form of a dread disease.
2. Modern education of doctors and laity is improving the results from treatment.
3. Lower lip cancers are less serious than buccal cancers and should be treated by excision or radiation in the hands of experts and usually dissection of the upper neck.
4. Irritation is a predisposing factor.
5. Syphilis does not exclude cancer.
6. Biopsies must be done.
7. Grading degrees of malignancy is valuable, but far from infallible.
8. In buccal cancer the anterior tongue has the best prognosis and the tonsillar region worst.
9. Where the growth is easily removable and apparently not of a more malignant type, we prefer surgery, but otherwise radiation.
10. Neck dissection should also be done if the case is not too unfavorable locally: otherwise X-ray should be used.
11. Mouth hygiene both pre- and post-operatively is important.
12. Pain can be treated by nerve injections.
13. Quick decision and vigorous treatment are the watchwords.

#### PNEUMOTHORAX AND PHRENICECTOMY IN THE TREATMENT OF PULMONARY TUBERCULOSIS\*

By J. MURRAY BEARDSLEY, A.B., M.D.C.M.  
180 ANGELL STREET, PROVIDENCE, RHODE ISLAND

The injection of gas into the pleural cavity for the purpose of putting the lung at rest was first accomplished by Forlanini of Italy in the year 1894. In this country John B. Murphy was the first to employ pneumothorax. In 1898 he reported five cases of pulmonary tuberculosis treated by this method. This discovery has, as you know, revolutionized the treatment of tuberculosis of the lung. The profession was slow to recognize the value of pneumothorax, and articles published a very few years ago refer to it as a method to be employed as a last resort after more conservative treatment has failed. This one idea—the promotion of rest by means of collapse—has led to many methods for the purpose of accomplishing the same end so that today when we are considering collapse therapy, we have to think of pneumothorax, unilateral or bilateral, oleothorax, phrenicectomy, apicectomy, intrapleural pneumolysis, intercostal neurectomy, extrapleural thoracoplasty and combinations of these and other less commonly used methods for promoting collapse of the lung.

Naturally, with all of these procedures at our disposal, a careful estimation of the value of each must be made if the maximum in results is to be accomplished—each case presenting, as it does, individual problems requiring various modes of attack.

With each discovery of new methods for promoting collapse it is understandable that each at the outset has had its ardent advocate and has been used in many instances to the exclusion of other methods to the point where enthusiasm has influenced good judgment. But, through the mistakes that have been made has come a clearer understanding of the indications for the use of each procedure, so that today the therapy of lung collapse rests on a much safer and saner foundation, notwithstanding differences of opinion that still exist.

The success of our final results depends to a great degree upon the proper selection of cases for treatment. This applies to surgical as well as medical cases. It is, therefore, of extreme importance

\*Read before the Providence Medical Association, March 6th, 1934.

that therapy in each case be relegated with care. At the collapse therapy division of the Charles V. Chapin Hospital it is our policy, and in my opinion a sound one, that no treatment be instituted until there has been a thorough investigation and discussion of every case, the participants of the conference being the tuberculosis specialist, the internist, the roentgenologist, and where surgical treatment is being considered, of course, the surgeon. These friendly discussions of problem cases as to diagnosis and treatment have been of inestimable value in the handling of cases and I believe that most of us have found them instructive.

When we come to a discussion of the indications for collapse therapy, as is the case in most medical conditions, it is difficult to lay down hard and fast rules, for the type of lesion and problem present in each may have many points of difference. Time does not permit an intimate study of the different pathological lesions that are encountered, such as exudative, productive, pneumonic, etc., but a clear understanding of the interpretation of these lesions is essential in order to follow the progress of the case intelligently and in order that intelligent treatment be carried out. Relative to this, our success has been due to a great extent to the improvement in X-ray technique and interpretation. We must not pass judgment, however, on a patient as soon as the evidence of the X-ray plate has been heard. The patient's history, physical examination, social and economic status, and temperament must be taken into consideration before therapy is advised.

The policy of the past to defer pneumothorax until other methods had failed has given away to the policy of beginning collapse therapy early. Practically all cases of unilateral disease, with or without demonstrable excavation, and where the contralateral lung is not too extensively involved to bear the additional burden thrown upon it, must be considered as possible candidates for collapse therapy. The decision as to whether or not there is an active lesion in the contralateral lung is frequently difficult to make, and careful physical examination, X-ray study and occasionally trial pneumothorax may be necessary in order to decide this question. When dealing with early lesions, especially soft subclavicular infiltrations, we are faced with making a decision as to whether to give the patient a trial at bed rest or whether to begin pneumothorax without delay. As we know, many will do well if collapse therapy is not undertaken.

On the other hand, in this type of case—as opposed to the chronic fibrotic lesions or those with thick-walled cavities—adhesions are less likely to be present and we may expect to achieve our best pneumothorax results in cases of this type. As a rule we may say that the success of collapse therapy is directly proportional to the degree of compression achieved, and that in dealing with excavations, to the degree of approximation of cavity walls. Probably neither of these policies—that of watchful waiting, or early pneumothorax—can be seriously condemned, but it has been our tendency to advise pneumothorax early, feeling that by so doing we will minimize the danger of the more serious complications. In this type of case we must give more thought to those—and this applies especially to the adolescent and early adult age groups in which treatment by bed rest may result in an advance of the disease either in adjacent lobes or in the contralateral lung, or both. The waiting policy, when pursued in lesions of this type, will in many cases lose for us the golden opportunity for an early cure and in others may prohibit the use of collapse therapy because of invasion of the opposite lung, or the development of a pleurisy may render the possibility of pneumothorax inadequate or impossible. In minimal apical lesions which tend to respond to treatment by bed rest and where pneumothorax is usually ineffective because of adhesions, we are justified in pursuing the policy of non-interference, but in these as in all others there should be a careful supervision. In the pneumonic type of lesion with its tendency to early excavation and invasion of other lobes, there is still a difference of opinion as to the value of pneumothorax. It has been our policy to recommend pneumothorax in the pneumonic type of lesion when the opposite lung is not involved. With reference to those cases presenting themselves with far advanced disease of which many in the past would have been considered "hopeless cases"—with more weapons of attack at our command, many may be salvaged if collapse therapy is undertaken.

Pneumothorax still occupies the first place in collapse therapy and as a rule is our first choice in all cases selected for this type of treatment. It is our feeling that the complications encountered during the course of pneumothorax are not a sufficient indication to justify any surgical intervention which will produce a permanent type of collapse, as a preliminary measure. This would appear to be

August, 1934

## PULMONARY TUBERCULOSIS

137

more especially so since oleothorax and intrapleural pneumolysis are becoming more effective as adjuncts to pneumothorax treatment. It is not necessary to go into a description of the technique of this procedure which in itself is not a difficult one, but to follow a large number of cases over a long period of time, treating the complications as they arise, calls for judgment, knowledge and eternal vigilance.

There would seem to be a definite indication for bilateral pneumothorax in a small number of carefully selected cases. Up until the present we have found only one case in which we have felt that this form of treatment was indicated. This particular case was in a patient with an upper lobe cavity receiving a partial collapse in this area and who later developed a spreading lesion in the opposite lung. Some cases that have come to my attention, however, in patients who had extensive disease on one side and a minimal lesion on the other, appeared to show signs of lessened toxemia and more general improvement when the lung with the more advanced lesion was completely collapsed, and the other lung allowed to re-expand. Here again each case is an individual problem and the selection of cases should be made with care.

With regard to the various operations upon the phrenic nerve that are employed for the purpose of promoting a temporary or permanent unilateral diaphragmatic paralysis—there is some lack of unanimity of opinion with regard to the value of this procedure, and more difference of opinion as to the indications for its use. There is no doubt but that phrenic evulsion has a valuable place in our armamentarium of therapy, and there is no doubt but that in the past the indiscriminate performing of this minor operation in improperly selected cases has led to scepticism in many quarters as to its value. At the Chapin Hospital we have rarely, if ever, employed phrenicectomy in cases where pneumothorax has not been given a trial. The argument has frequently been used that phrenicectomy may save a patient two or three years of pneumothorax treatment and for this reason should be given a trial. In certain cases this is probably true and early lesions may heal and thin-walled cavities may be closed, but I feel the same argument holds here which was mentioned previously—namely, that while we are waiting to see whether or not an imperfect collapse will achieve this end, when we had it in our power to produce a more perfect collapse, the pleuritis, the bronchogenic spreads or other dreaded complications may arise which might have been avoided.

We have felt that phrenicectomy is indicated in cases presenting the following problems:

1. In those cases where pneumothorax is unsatisfactory, and especially in this group those cases in which the lung is adherent to the diaphragm or where the lung is held out by band-like adhesions with a diaphragmatic attachment. Elevation of the diaphragm in such cases will tend to promote a more complete collapse, although pneumolysis may be more effective in certain types of adhesions, and fixation of the diaphragm may limit the degree of compression in others.
2. In those cases where the possibility of thoracoplasty is being entertained. This may include cases where pneumothorax is impossible because of adhesions or cases where there is a partial pneumothorax. The resulting benefit of phrenicectomy in a certain number of these cases may render later thoracoplasty unnecessary—and where the more radical operation is indicated the added compression minimizes the danger of spread and will also render less the amount of rib resection. In addition it may also act as a functional test operation in this group of cases.
3. Basilar lesions, especially with cavity formation, where the lung is adherent to the diaphragm rendering pneumothorax ineffectual.
4. In cases of pulmonary hemorrhage where it is impossible to give pneumothorax.

We have not employed phrenicectomy in cases with bilateral disease where pneumothorax is being given on the opposite side, although the procedure is possibly warranted when the outlook is rather hopeless and there appears to be no other measures available that will halt the progress of the disease.

One might divide the various maneuvers for achieving collapse therapy into two groups—those of a temporary nature which may be tried and, failing to achieve the desired results, may be recalled, allowing us to begin again on a new line of attack. On the other hand are those procedures which are permanent—phrenicectomy falls into this latter group, and if no useful purpose has been accomplished, the high diaphragm will always remain to remind us that we have one less weapon with which to fight. We should always remember the possibility that at some future time the opposite lung may be our chief concern and the treatment of this lung may be considerably handicapped if we have paralyzed the diaphragm on the opposite side. Phrenic crushing has been substituted and has its

place, but the results are much more inaccurate. Failure is the rule when accessory phrenics are present; in other cases a permanent paralysis is produced and if a temporary paralysis is accomplished the collapse must be maintained until normal function is restored, regardless of the response of the diseased lung to this procedure.

My own conservatism with respect to phrenic nerve operations is based to a certain degree upon the belief that unless the need is great, it is not a sound surgical principle to sacrifice any structure that is performing a useful physiological function. Furthermore, we should not forget that elevation of the diaphragm gives rise to disturbed anatomical relations within the abdomen.

The above observations are not set forth as objections to phrenic nerve operations when justifiable indications exist. They are merely suggestions that cases be chosen with care, and that operations shall not be performed upon cases until their selection has been given very careful consideration, which to a great degree has not been done in the past.

## SOCIETIES

### PROVIDENCE MEDICAL ASSOCIATION

The regular monthly meeting of the Providence Medical Association was called to order by the President, Dr. Charles F. Gormly, Monday evening, June 4, 1934, at 8:50 o'clock.

The records of the last meeting were read and approved. The Secretary announced for the golf committee that members could attend the dinner even if not players, that there would be prizes for non-players, and all were urged to send in their acceptances promptly. A letter was read from the State Public Health Commission, stating that for reasons of economy they were planning to give up the examinations of urine. Dr. Round explained the matter. It was voted that the association approved this contemplated action. It was announced that the Standing Committee had appointed a committee consisting of the President, Secretary of Public Relations Committee, and Secretary, to arrange an open forum on October 8 to discuss medical economics and other associated matters. The Standing Committee also recommended that the President appoint a committee to consider im-

provements in the meeting hall, and it was voted that the President appoint such a committee of not more than five members.

Dr. Myer Asekoff reported a case of Alzheimer's Disease or pre-senile dementia.

Dr. Julius G. Kelley read the first paper of the evening on "Spondylitis." This summarized the conclusions reached at Tucson, Arizona, where many arthritic persons go for treatment. There they divide the cases by a clinical classification into six groups and these were carefully outlined by the speaker. Dr. Horan discussed the paper.

The second paper, by Dr. Walter Bauer of the Harvard Medical School and Massachusetts General Hospital, was on "The Differential Diagnosis of Rheumatoid Arthritis."

This speaker felt that cases could be divided roughly into two types: the degenerative and the proliferative. He showed a series of excellent slides illustrating the common lesions and reported a number of cases of gonorrhreal arthritis and gout. Drs. Henry McCusker and Bauer discussed the paper.

Although both of these papers evidenced enthusiastic, scholarly work by their writers, they could have each been cut down to half their length without sacrificing any essential value, and the meeting would not have extended to the ridiculously late hour of 11:30 P. M.

Attendance 120. Collation was served.

Respectfully submitted,

PETER PINEO CHASE,  
*Secretary*

## REPORTS OF COMMITTEES

(Continued from the July issue)

### THE RHODE ISLAND MEDICAL SOCIETY

In the absence of the chairman of the Committee on Survey of Maternal Obstetrical Deaths, the following report was read by the Secretary, and it was voted to accept the report and continue the Committee:

#### REPORT OF COMMITTEE ON MATERNAL MORTALITY

The committee to make a five year study of maternal mortality in Rhode Island continued its work during 1933.

During the past three years two hundred cases have been investigated—fifty-seven in 1931, sixty-nine in 1932 and seventy-four in 1933. The increase in the number of cases investigated each succeeding year is not an indication of a corresponding increase in the maternal mortality rate, but rather an indication of more complete death returns and a more thorough investigation of deaths associated with pregnancy and labour. During the first year of the survey only such cases were investigated as were officially listed as puerperal deaths. Each succeeding year there have been a larger number of investigations of cases in which the cause of death was non-puerperal but was associated with pregnancy or labour. These cases, while not strictly puerperal deaths, are important because when properly studied they may furnish indications for treatment of the more serious complications of pregnancy.

I wish to again acknowledge the debt which the Society owes to Dr. Goldberger for the time which he has put into investigating these cases and the tact and intelligence with which the investigations have been made.

The committee asks that it be continued another year.

Respectfully submitted,

EDWARD S. BRACKETT, M.D.,  
Chairman

---

REPORT OF THE BOARD OF TRUSTEES OF  
THE RHODE ISLAND MEDICAL LIBRARY BUILDING

As the Chairman of the Board of Trustees of the Rhode Island Medical Society Library Building, I beg leave to submit the following report covering the past year:

The lawn around the building has been seeded during the seasons of 1933 and 1934. In the Fall of 1933 the vestibule and lower hallway were painted. The bookcase in the Reading Room has been rebuilt to conform to the other shelves and to allow more adequate space for reference books. There have been minor repairs to the heating system. Permission was given for hanging in the Library building a portrait of the late Clarence T. Gardner. There have been no formal meetings of the Committee as a whole.

Respectfully submitted,

ROLAND HAMMOND, M.D.

ANNUAL REPORT OF THE LEGISLATIVE COMMITTEE  
OF THE RHODE ISLAND MEDICAL SOCIETY

*Public Health Legislation, 1934*

The following health measures were passed by the State Legislature:

Senate Bill No. 56, an Act to vacate the forfeiture and revive the Charter of Broadway Hospital.

Senate Bill No. 123Am., an Act relating to narcotic drugs and to make uniform the law with reference thereto, being in amendment and repeal of certain sections of Chapter 158 of the General Laws, entitled "Of the sale and distribution of certain narcotic drugs," as amended by Chapters 793, 1024, 1236, 1419, 1567, 1794, and 1948 of the Public Laws, passed respectively in 1926, 1927, 1928, 1929, 1930, 1931, and 1932.

Senate Bill No. 178, an Act in amendment of Section 6 of Chapter 1749 of the Public Laws, 1931, entitled "An Act for the promotion of public health and sanitation at camps, camp grounds, bath houses, bathing beaches and amusement resorts."

Senate Bill No. 224, an Act in amendment of Chapter 1405 of the Public Laws of 1916, entitled "An Act authorizing the City Council of the City of Providence to appropriate and pay annually to the Providence District Nursing Association such sum of money as the City Council of said City may deem expedient," and Chapter 687 of the Public Laws of 1925, in amendment thereof.

Senate Bill No. 252, an Act to validate certain appropriations made by the town of Bristol at a financial town meeting held March 19, 1934, and authorizing said town to make certain appropriations hereafter.

House Bill No. 536, an Act relating to the Division of Child Hygiene maintained under authority of the State Public Health Commission.

House Bill No. 663, an Act authorizing the town of Jamestown to make an annual appropriation to promote public health and nursing service in said town.

House Bill No. 707, an Act in amendment of Chapter 1571 of the Public Laws passed at the January Session, A. D. 1917, entitled "An Act authorizing the City Council of the City of Cranston to appropriate and pay annually to any incorporated anti-tuberculosis or district nursing association or other corporation engaged in social welfare work, located and performing their work in the City of Cranston, such sums of money as the City Council

of said City may deem expedient," as amended by Chapter 707 of the Public Laws passed at the January Session, A.D. 1925, and as further amended by Chapter 895 of the Public Laws, passed at the January Session, A. D. 1926.

House Bill No. 799A, Resolution making an appropriation for the purpose of repairing the prison chapel damaged by fire at the State Institutions.

House Bill No. 810, Resolution making an additional appropriation for the State Sanatorium to be expended during the fiscal year ending June 30, 1935.

House Bill No. 818, an Act in amendment of Section 3 of Chapter 79 of the General Laws, entitled "Of the rehabilitation and education of injured and crippled."

House Bill No. 835, an Act in amendment of and in addition to Chapter 169 of the General Laws, entitled "Of the regulation and practice of dentistry," as amended.

House Bill No. 884A, an Act authorizing the City of Pawtucket to make an annual appropriation to promote public health and nursing service in said City.

The following Bill was left in House Labor Legislation Committee:

House Bill No. 736, an Act in amendment of and in addition to Article 2 of Chapter 92 of the General Laws, entitled "Of payments to employees for personal injuries received in the course of their employment, and of the prevention of such injuries." This proposes to amend the workmen's Compensation Act by providing compensation for disabilities resulting from certain occupational diseases named in the bill.

Senate bill 123Am., Chapter 2096: Three-quarters of the original Narcotic Act with its amendment has been re-written and amended, thereby greatly strengthening the power of the State Narcotic Board by defining more clearly by whom and how narcotics shall be administered. A copy of this Act accompanies this report.

Senate bill 178, Chapter 2124: This Act allows the General Assembly to vote an extra appropriation. This money to be expended by the Public Health Commission. Vouchers for this money shall be furnished by two members of the Commission, or the Chairman of the Commission and the Director of Public Health.

Senate bill 224, Chapter 2134: This Act limits the appropriation \$10,000.

Senate bill 252, Chapter 2141: This Act applies to a \$7500. appropriation, a part of this money to be used in the Town of Bristol for work of the American Red Cross, the Colt Memorial Ambulance Service and the District Nursing Association.

House bill 536, Chapter 2125: This Act gives added help to the Town of East Providence for Child Hygiene work.

House bill 663, Chapter 2159: Appropriates \$2000 to be expended by the American Red Cross.

House bill 707, Chapter 2152: This appropriates a sum not exceeding \$7500. got any one year.

House bill 810, Chapter 74: Appropriates \$350. for further repairs and alterations.

House bill 818, Chapter : This Act allows the General Assembly to appropriate annually such sums as it may deem sufficient and advisable for carrying on this work, through vouchers signed by the Commissioner of Education.

House bill 835 Chapter : This Act defines the organization of the Board of Dentistry. It also regulates the practice of dentistry, and defines by whom this profession shall be practiced in the State. It allows the Board in its discretion after hearings to revoke or suspend registrations and certificate of persons deemed guilty of using fraudulent or misleading advertisements such as are defined in the Act. The Board may also suspend a license of a person found guilty of dishonorable or grossly unprofessional conduct.

House bill 884A, Chapter 2164: This Act makes annual appropriation not exceeding \$2500. to be expended in promoting public health and nursing service under supervision of the Pawtucket and Central Falls Chapter American Red Cross.

Respectfully submitted,

HERBERT E. HARRIS,  
Chairman.

---

REPORT OF THE MEDICAL EMERGENCY RELIEF  
COMMITTEE OF THE R. I. STATE  
MEDICAL SOCIETY

Your committee wishes to report that it has successfully completed the first phase of its work. It has developed and put into operation a state program of Medical Relief under F.E.R.A. Rules and Regulations No. 7.

The plan as drawn up by your committee was submitted to and accepted by the House of Delegates of the R. I. Medical Society at its last regular

meeting. It received the approval of the State Emergency Relief Administration of R. I. Under this accepted plan it is essential for each constituent district society to adopt a local plan for submission to and approval by the State Emergency Relief Administration. To facilitate the formation and adoption of these local plans by the District Societies, the chairman and secretary of your committee made personal visits to the various District Societies. Their reception was uniformly cordial and the discussion mutually enlightening.

While the operation of this program both on the part of the organized medical profession and the State Emergency Relief Association is permissive and not mandatory all of the District Societies with the exception of the Washington County Society have chosen to take part in it.

Each plan as submitted has been accepted with certain minor exceptions referring largely to the question of a mileage allowance. All mileage allowances were rejected if a part of the plan. The plans are working more or less successfully everywhere with the exception of Woonsocket where the local Relief Administration on April 23rd was ordered to stop issuing authorizations for Medical Relief by Mayor Toupin. As this is a purely local affair that concerns the organized profession and the local relief bureau of Woonsocket the state committee has not as yet taken any official part.

We learn from the National headquarters that recent reports indicate that 46 of the 48 states have programs in operation. We are happy to report that Rhode Island was among the early ones in getting their program in operation.

Finally, as appears in the last paragraph of the State Plan, we recommend continuation of the committee as a professional advisory committee to the State Emergency Relief Administration and that it continue to be known as the "Emergency Relief Committee of the R. I. State Medical Society" to carry on the next phase of this work.

CHARLES F. GORMLEY, *Chairman*  
WM. P. BUFFUM, *Secretary*

It was voted that the Emergency Relief Committee be continued.

#### COMMITTEE ON EXPERT MEDICAL TESTIMONY

The Committee on Medical Expert Testimony wishes to report that in conjunction with the com-

mittee on the Rhode Island Bar Association has held several meetings resulting in some progress in the matter under consideration. The complexities of medical expert testimony in its various phases render the subject one which cannot be finally reported on until some more time has been devoted to it by your committee. Accordingly the Committee requests that it be continued to a further date.

Respectfully submitted,

CHARLES GORMLY,  
ROLAND HAMMOND,  
JOHN E. DONLEY,  
*Chairman.*

#### PHYSICAL THERAPY SESSION TO BE HELD IN PHILADELPHIA

The thirteenth annual scientific and clinical session of the American Congress of Physical Therapy will be held in Philadelphia at the Bellevue Stratford, September 10, 11, 12, 13, 1934.

This year's session will be especially noteworthy because of the excellent program which has been arranged. Outstanding clinicians and teachers will present the results of the newer researches in the field emphasizing short wave therapy, hyperpyrexia, light therapy, remedial exercise, massage and other interesting subjects.

On Wednesday evening, September 12th, a joint session will be held with the Philadelphia County Medical Society.

Special features will be the scientific and technical exhibits and the small group conferences. The latter have been arranged for Tuesday morning. Every specialty of medicine and surgery will be represented. The technical application of physical measures will be demonstrated and the fundamentals emphasized. The general sessions will be taken up with symposia on cancer, arthritis, poliomyelitis, industrial surgery, etc.

Friday, September 14, has been set aside for hospital teaching clinics which will be held in the leading institutions of Philadelphia.

You should plan now to attend this very important medical gathering. Physicians and their technicians, properly vouched for, are eligible to attend.

Send for preliminary program. Address American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago, Illinois.

*Further Committee Reports continued  
in a future issue.*

MONTHLY REPORT OF HEALTH DEPARTMENT ACTIVITIES, PROVIDENCE, R. I., JUNE, 1934

The marriages for June, 1934, were 330 as against 115 for May, 1934, and 209 for June, 1933. There were 100 cases of measles reported as against 6 for June, 1933. The last outbreak of measles occurred in 1931-32. The present outbreak is quite limited so far. Toxoid treatments for diphtheria are being discontinued because of some unpleasant reactions and toxin-antitoxin is being substituted. Alum-toxoid treatments are at present on trial.

VITAL STATISTICS\*

	1934	1933				
	June	June	1934	1933	1934	Deaths
			June	June	June	1934
Deaths, all	249	224				
Deaths under 1	24	30				
Deaths over 70	87	52				
Births	409	387				
Marriages	330	209				
Infant Mortality	58	77				
Death rate	11.98	10.78				
Birth rate	19.67	18.61				

Principal Causes

1. Heart Disease	51
2. Cancer	34
3. Pneumonia	11
4. Nephritis	20
5. Cerebral Hemorrhage	30
6. Auto Accidents	4

Laboratory Examinations

Charles V. Chapin Hospital	1,454	1,685
----------------------------	-------	-------

Milk Department

No. Samples Tested	1,506	1,613
No. Licenses Issued	341	101

Physicians

No. Visits to Sick Poor	324	770
Medical Inspection	54	32

Diphtheria Immunization

	1934	1933	
	June	June	1934
No. Schick Tests	22	42	
No. T-At Treatments	319	957	
No. Toxoid Treatments	145	137	
No. Alum-Toxoid Treatments	11		

Smallpox Immunization

No. Vaccinated	292	331
----------------	-----	-----

Inspectors

Food Insp. Visits to Restaurants	253	
Food Insp. Visits to Stores	260	743
Food Insp. Visits to Saloons	160	
Food Insp. Visits to Class D Clubs	70	
No. Saloon Licenses approved	1	
No. Victualling Licenses approved	5	
Peddlers Approved	37	
Sunday Sales Licenses	16	
Sanitary Insp. No. Visits	229	156

Nursing Visits

Communicable Disease Nurses	1,325	1,382
Child Hygiene Nurses	1,742	2,493
Parochial School Nurses	950	1,739

Child Health Stations

Visits by children	1,340
--------------------	-------

CONTAGIOUS DISEASES

	1934	Cases	Deaths		
	June	June	1934		
		May	June	June	May
Scarlet Fever	24	37	52	1	0
Diphtheria	2	5	3	0	0
Whooping Cough	141	129	68	0	2
Measles	100	6	29	0	0
Tuberculosis	6	...	10	10	8
Typhoid Fever	1	0	1	1	0
Septic Sore Throat	1	0	3	0	2

\*Includes non-residents.

DENNELL L. RICHARDSON, M.D.,  
Superintendent of Health

NOTICE

THE AMERICAN COLLEGE  
OF PHYSICIANS  
will meet in  
PHILADELPHIA, 1935

The American College of Physicians will hold its Nineteenth Annual Clinical Session in Philadelphia, April 29-May 3, 1935.

Announcement of these dates is made particularly with a view not only of apprising physicians generally of the meeting, but also to prevent conflicting dates with other societies that are now arranging their 1935 meetings.

Dr. Jonathan C. Meakins, of Montreal, Que., is President of the American College of Physicians, and will arrange the Program of General Sessions. Dr. Alfred Stengel, Vice President in Charge of Medical Affairs of the University of Pennsylvania, has been appointed General Chairman of local arrangements, and will be in charge of the Program of Clinics. Mr. E. R. Loveland, Executive Secretary, 133-135 S. 36th Street, Philadelphia, Pa., is in charge of general and business arrangements, and may be addressed concerning any feature of the forthcoming Session.